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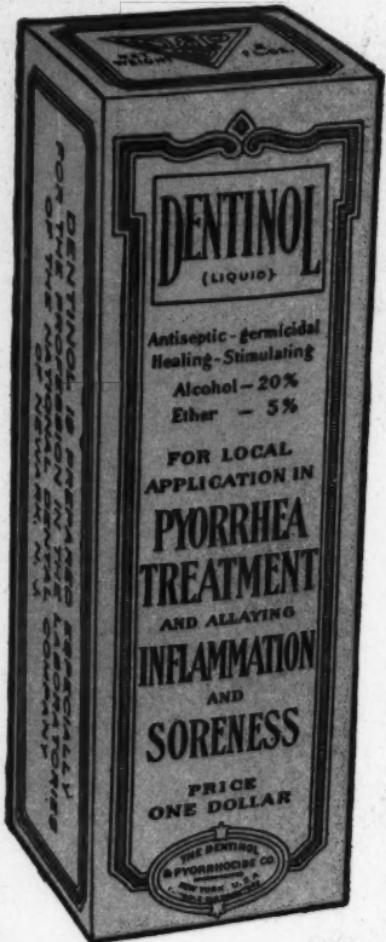
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HYGIENE

JANUARY ~ *A Journal for Dentists* ~ 1924

Published for THE RANSOM & RANDOLPH CO.
Toledo, Ohio, U. S. A.

Why destroy germs in diseased mouths at the expense of oral tissue?



DENTINOL

is a combined germicidal and healing agent.

Dentinol reduces soreness, inflammation and infection.

Dentinol tends to repair broken-down diseased gum tissue. It is a rapid healer in all pyorrhoeic conditions.

Dentinol is non-toxic and non-caustic.

DENTINOL IS ALWAYS USED FULL STRENGTH IN THE TREATMENT OF PYORRHEA. It is applied locally with cotton or with flat-tip syringe, to all inflamed areas and in pus pockets.

Use Dentinol

Compare Results

SAMPLES: A trial bottle of Dentinol for use at the chair and samples of Pyorrhocide Powder for distribution to patients, sent free on request.

The Dentinol & Pyorrhocide Co., Inc.

Sole Distributors

1480 Broadway

New York

ORAL HYGIENE

Registered in U. S. Patent Office—Registered Trademark, Great Britain.

FOUNDED 1911

JANUARY, 1924

VOL. XIV, No. 1

World's Most Powerful Station to Broadcast Oral Hygiene Messages

IN PITTSBURGH the most powerful radio broadcasting station in the world is located, that station being KDKA of the Westinghouse Company.

KDKA is heard by the entire country, by Hawaii, Alaska, and often in Great Britain.

Beginning Tuesday, January 8th, at 7:30 p. m., and continuing every Tuesday thereafter until January 29th, inclusive, at the same hour, a talk upon some phase of dentistry will be broadcasted from KDKA.

We would suggest that all dentists instruct their friends and patients that these talks will be given upon January 8th, 15th, 22nd and 29th, at 7:30 p. m., Eastern time, and will last for fifteen minutes.

The speakers will be Dr. Albert I. Wise, Dr. Bruce P. Rial, Dr. H. D. Lyon and Dr. Rea Proctor McGee—all of Pittsburgh.

It is hoped that the dentists over the country who pick up these talks on the radio will not only write in to KDKA Station themselves, but request their friends to do so, in order that this station may know how many people are interested in dentistry as a subject for broadcasting over the radio.

The talks that are given will be printed in ORAL HYGIENE after they are delivered and may be used either as they are or varied to suit the occasion for broadcasting in other districts.

The radio offers a very prompt and very widespread agency for reaching the intelligent public.

Little journeys to the fountain-heads of science

IF W



LL those who saw the great actor, Sothern, in that wonderful play, "If I Were King," have something to remember always; those who were not so fortunate certainly missed an artistic treat.

Isn't it strange how people who are not kings, and really do not know the first thing about how to run a kingdom, want to show the king how to run *his* kingdom? Well, it's just the same with running dental associations and dental colleges.

Those of us who have never been given the opportunity to run the American Dental Association, or some great dental school, just think we can give cards to the folks who do run them—and then win the game.

However, as a matter of fact, we will all, if cornered, probably admit that no one without experience could possibly *know how* to run a dental school after all, but, as another matter of fact, there's no reason why others, without this experience, should not have certain ideas upon the subject, and if they can induce some editor to air their views, what's the harm?

Situated as I have been, and

still am, I am constantly seeing patients of other dentists. - If I were asked today what the most universal fault of the great majority of dentists is—of *good dentists*, I mean—I would unhesitatingly say, "Lack of careful oral examinations."

A patient, as a rule, does not go to a dentist and tell him what he needs to have done. He does not say, "The upper second molar on the right has never given me any trouble, but there is a small cavity upon its distal surface which I would like filled."

Nothing of the kind can possibly happen. The patient says, "I would like my teeth put in order;" and if the dentist does not examine, *for such a patient*, every surface, every nook and cranny of every tooth he does not do his patient justice, because the patient expects, and has a right to expect, that every fault will be discovered.

The dentist should have a stereotyped method of examining teeth. It matters not whether he commences with the right upper third molar and goes around the arch, or commences with the left lower molar, just so he always commences with

By C. EDMUND KELLS,
D.D.S.,
New Orleans, La.

IF I WERE KING

the same tooth, and continues on in the same stereotyped manner.

Every portion of every erupted crown is either in plain view, or accessible to an explorer, the proximal surfaces alone excepted. Many of these surfaces can often be passed upon at a glance; many cannot. Where there is any doubt about an approximal surface, the region should be dried, the space itself cleared by a blast of *warm air*, and silk and explorer used most carefully. And again, if there is still the slightest doubt about it, a wedge should be inserted; no doubtful space should be passed by "on a chance"—that's not what the confiding patient asks for.

Do dentists, as a rule, examine their patients' teeth in any such systematic manner? Judging from the results I see, I should say not.

Now, tell me, if you can, why dentists, as a class, *should be thorough* in their examinations? I don't believe you can do that, but I can tell you in a moment why it is not surprising if they are not thorough in their examinations, and that is because they, as dental students, never were taught to be thorough. "As the twig is bent, etc."—not having

been taught to be thorough while in college, why should they learn to be thorough after leaving college?

Now then, "If I Were King," the very first thing that I would do would be to establish a special "chair" to cover oral diagnosis, and I would consider this department second to none in point of actual value in the education of the dentist.

The teeth of every student would be examined at the beginning of each school term, and if they needed any attention, they *would get it*. Either he would go to some dentist of his choice, or some senior would do the necessary work. No excuses.

Time and again we meet dentists whose own mouths show neglect. How can they impress their patients favorably under such circumstances? The cause? Nine times out of ten, because the necessity of taking care of *their own teeth* was not drilled into them while at college.

At the end of each school term the mouth of each student should be examined by the professor of the chair we have just had established, and the conditions entered upon his rating card, and at the end of his final term, if his own

mouth was not in good condition, I would not let him pass. He should not get his diploma, because if he does not value his own teeth, how in heaven can he be capable of caring for the teeth of others?

When the time comes, certain patients—the same to each member of the class—would be given them for examination and charting, and believe me, I'd value this examination just as highly as, if not a little more so than, the examination upon any other subject—barring none.

Time and time again have patients come to me, saying, "My dentist says this cavity is too small to fill." Now college boys should be taught that no cavity is too small to fill; that it is infinitely better to put in a small gold or amalgam filling the size of a mosquito's foot than to fill the root canal.

And they should be taught that, with a mirror and explorer, every surface of a crown can be reached, and the X-ray is of no value for detecting decay in the teeth, ill-fitting crowns, or overhanging ledges of filling material. That fact should be pounded into their heads good and hard.

And then, after all this drilling into their heads of the value of a careful and thorough examination of the teeth, the professor, believe me, would have accomplished something worth while, and his chair should be considered the most important in the whole institution—that is, if one can be more important than all the others.

Another point: No matter

how well trained the dental student's mind and fingers may be, if he has not good health, he must prove a failure, and the time and money spent upon his dental education were worse than wasted.

Such being the case, every student would undergo a physical examination *every year* as he entered, and if any weak spots were found in his makeup, every effort would be made to eliminate them. The boys should be turned out physically, as well as mentally, fit.

Colleges should be run upon a semi-military basis—that is, the personal appearance of the students should be considered. At stated intervals, or possibly at intervals not stated, in order to catch them unaware, the students would be lined up for inspection, and any who "fell down" under this inspection would be *privately* taken to task.

The aim of the college should be to turn out *gentlemen* graduates.

Nor would I stop here. The dental student is *educated to take care of patients as they are given him in the clinic*.

Getting away from college surroundings and into his new environment, he will be like a fish out of water.

When he bids goodbye to these surroundings and conditions, and starts in to practice for himself, not having been taught how to equip an office, he naturally must go to a dental supply house for advice—and such advice as he often does receive!

He probably does not know that in the selection of his oper-

ating room the *light* is the most important feature of all. He probably does not know that next to the light, the color of his wall, ceiling and floor is most important.

Evidently all this is not known to the dental supply houses that have educational departments for the purpose of *educating the college graduate*.

I say "evidently not known" advisedly. All one has to do is to read their booklets to learn what these educators do *not* know, and this can be verified by looking at some of the offices they have planned and equipped!

If the recent graduate goes to such an establishment for advice, it is a ten to one chance that he will regret it.

Once again, "If I Were King," each college would be equipped with several dental suites, each consisting of reception room, operating room and laboratory, and each furnished in an appropriate and inexpensive manner.

Each senior would take his turn using a suite, and here he would be taught how to maintain an office, how to receive and handle his patients, a system of bookkeeping, and, in fact, here would be put the finishing touches of the making of a practical dentist. In other words, he would get a pre-graduate-post-graduate course.

The longer I practice dentistry, and the more I come in contact with dentists and *dentistry of the day*, the more do I believe in the facts as they have

just been given, and the more do I believe that the colleges fail to recognize these cardinal requirements in the dental education of the college youths.

As I take it, the dental colleges of today are run just exactly as were the colleges of my day, *only more so*, while there is not a business extant, which is running successfully today, the management of which has not been revolutionized during the past twenty-five years. The business men who have not kept pace with the times have gone to the wall; they could not stand *modern* competition.

Upon my desk are the "announcements" of a number of the best-known dental colleges of the land. I have scanned these pages carefully, but failed to find anything that relates to the subjects herein recited.

It is possible that some or many of our colleges do all these things for the good of their boys, but they do not list these features amongst their attractions.

Possibly the deans might say that the value of oral examinations and the other questions I have raised are not even mentioned in their announcements because they are all taken as a matter of course. If that is the explanation, it seems to me a very unsatisfactory one. In that case, why do they stress all those "ologies" and other departments, which certainly are a "matter of course" with any dental college?

"If I Were King" I would—but I am *not* King, so what's the use?

By T. C. BONNEY, D.D.S., Aberdeen, S. D.

Cartoon By L. Paul Schweinberg

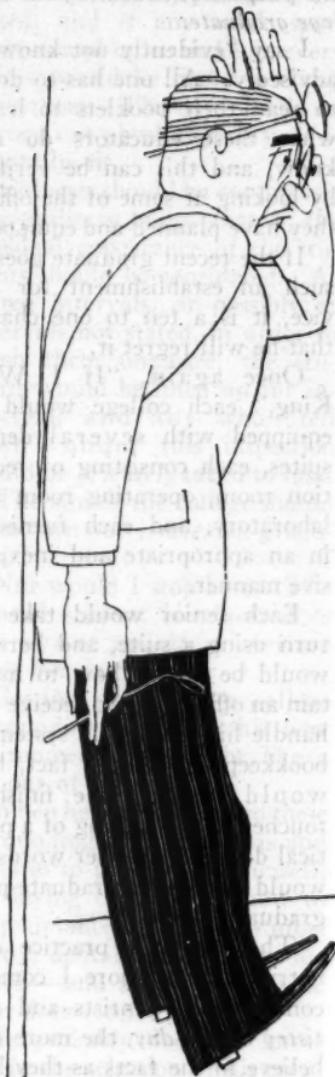
PORTRAIT of Talking to

FOW do you do, Doctor? I'm so glad to meet you; I've heard my husband speak of you so many times and I feel so thrilled at meeting you, Doctor, er—Doctor, er—I'm sorry, but I didn't quite catch your name. Doctor Jones? Oh, yes! So silly of me. I enjoyed your paper *so* much the other evening, the one you read at our club, and I told Charley—he's my husband, you know—that I really must go up and see you.

I've got an awful lot of work that has to be done, but I'm such a coward. Every time I think of a dentist's chair I get as nervous as a cat. The last time I was to see a dentist I had a tooth subtracted and I just thought I'd die. The roots were wrapped around the jaw and the dentist said he never in all his life saw such long roots on a tooth.

My jaw was broken in two or three places, and pieces of bone kept coming out for days and days.

And, Doctor, that isn't the half of it! He hurt me something terrible, and he is one of those painless dentists, too. It must



(With Apologies to Patricia
Collinge in *Life*)

on LADY to Dentist



be fierce for persons who go to dentists who do not use painless methods in their business; I don't see how they *ever* stand it.

And I want to bring Junior up to see you. He is our only child and a perfect little darling, though he is not very strong. The school nurse sent a card home with him the other day and he has a number of teeth that will have to be filled. Oh, no! He's only a little over five years old. No, the nurse did not say to have the teeth filled; she said they ought to be subtracted, but Junior is *so* nervous I know he never could stand to have them pulled.

Give him gas? Heavens, no! I'm deathly afraid of gas. Mother took it once about twenty years ago to have a tooth pulled and it took three or four men to hold her in the chair, and the dentist broke the tooth off, and mother's face was black and blue for days and days. Junior has a weak heart, you know; I guess it's hereditary.

But *please* tell me something about your work; it must be such fun. Don't you get awfully tired just fixing teeth all the time? I should think a regular doctor's work would be so much

more elevating. They have to read and study all the time and it helps to keep them from getting into a rut. And they have meetings and read papers that are tremendously interesting.

Oh, no! I never read medical papers, although I've always thought I'd have made a good doctor. My friends say I have such a sympathetic personality and that I would have been *such* a success. I was telling Mrs. Blank about you the other day, doctor, er—.

You know she wants to get some plates and Dr. X wants \$65.00, and I told her I'd ask you what you charge. You couldn't tell until you have seen her? Why, that's funny. She just wants a plate up above and part of the teeth below, and maybe some gold fillings and three or four gold crowns to make the plates look natural. She had the *whitest* teeth, but she had rheumatism and infidel men-jeetus and spent I don't know how much trying to get fixed up.

The doctor she went to used Abraham's machine and found out her teeth were bad, and so she had them drawn and her tonsils taken out and has been feeling just fine ever since, except that the doctor who took her tonsils out let his knife slip, or something, and cut the tip off her uterus, and that bothers her some yet. You know, Doctor, er—I've heard oodles of persons say how hard a dentist has to work, and it always makes me *laugh*, because I know it must be just too jolly for anything, isn't it? Yes, that's what I've always said.

I told Charley—my husband, you know—that being a dentist must be just too sweet for anything; they are always so nice and clean and have such short hours and practically no expense. And they meet such interesting people, too, that they must gain many wonderful inspirations and develop many intimate friendships (I know you understand just how I mean that, Doctor) that would not be possible in other fields of mechanical endeavor.

It must be perfectly thrilling to be able to squirt a little stuff around a tooth, take up a set of tweezers and pick out the roots and get a dollar for it. The dentist who pulled the tooth I was telling you about charged me *three dollars*, and I said then I'd never go back to him. You *don't* think that was too much to charge? Why, doctor, er—he wasn't over half an hour at the outside, and, besides, our family doctor came over and helped him and *he* never charged me a cent.

I heard them saying something about shock and collapse, and I guess the dentist isn't very well. I thought he looked pretty sick as I was leaving the office.

And oh, yes, Doctor, er—what do you think it would cost me to have my teeth X-rayed? You don't do X-ray work? Why, I thought every first-class dentist had an X-ray machine in his office. You think a man should have special training for that kind of work? Why, Kitty Black, who rooms at our house, does *all* of the X-ray work for Dr. Young and she never saw

an X-ray machine in her life until she started to work for him three weeks ago! And she makes the most *wonderful* pictures, and they only charge \$5.00 for a full set of eight plates.

But, of course, they specialize in that kind of work, that and pyorrhea treatments, and so charge more, naturally, than a common dentist would, and that's why I spoke to you about it.

And, Doctor, don't you think this talk about fetal inspection is all nonsense? You *don't*? Why, it is absurd to think that just taking the nerve out of a tooth could do any harm.

I've got lots of teeth in my mouth that have the nerves out of them and they have never injured me in any way, and it has been years since it was done. How do I know they have never injured me? Why, because they have never hurt me the least bit.

A friend of mine went to a dentist just the other day—I'll not mention his name, but you

know him real well—and he wanted to subtract some teeth she wanted filled because they were rotted so bad; at least that is what *he* said, that the nerves would have to be pulled out and the teeth treated if she wanted to have them filled, and he said that was not the best thing to do—pull the nerves out, I mean.

And when she told me about it I told her just what I thought, and I guess after the way I talked she'll look up another dentist. You have to go? Well, I'm just frightfully glad to have met you, Doctor, er—and have enjoyed our little visit *so* much. You *must* come out and see us some time. I know Charley, my husband, will enjoy a visit with you as much as I have this all too short chat with you this afternoon. I will say, though, that I'd never have guessed you to be Doctor, er—. You don't look a bit like I think a professional man should look. Well, goodbye, Doctor!

Are There Any Dental Schools Doing This Stunt?

The operations of a "diploma mill" by a medical college in Kansas City which is alleged to have turned out "physicians" in three months, was brought to light through the work and wit of Harry Thompson Brundidge, a reporter for the *St. Louis Star*.

Physicians at the head of the school and the mill now are held under heavy bond in circuit court, pending trial on charges of obtaining money under false pretenses. Diplomas, designating the graduates as physicians, were sold for amounts ranging from \$1,000 to \$5,000, according to the evidence gathered by Brundidge.

Using his first two names, Harry Thompson, the reporter struck up acquaintance three months ago with one of the "graduate" physicians in St. Louis. The reporter expressed his desire to become a physician, and with money furnished by his paper he went to the medical school in Kansas City for three months and purchased a diploma for \$1,000.—*Editor and Publisher*.

Why RUGGIE

What is
the
difference
between
radiation
and
radiation
therapy?

¶ Here is a splendid story for use in schools and in children's clinics where the story method is employed in teaching oral hygiene.

I grew up with a sense of the traditional, of what it means to be a man. You can't just do it, you have to work at it, to prove that you can do it. I used to be—interested in reading about or doing what our heroes did best but did something that was not yet published. Now I have some time to do it when I'm finished. It's different. I'm down to my last day, my last month, my last week. I'm approaching the line. I'm nervous, but I'm not afraid. I'm not afraid to die.

The graph illustrates the rapid increase in the elderly population in the United States over the past century. The percentage of the population aged 65 and over grew from approximately 4% in 1900 to about 13% in 2000. The rate of growth accelerated significantly after 1940, particularly after 1960, reaching nearly 13% by 2000.

Year	Percentage of Population Aged 65 and Over
1900	4.0%
1920	5.0%
1940	7.0%
1960	10.0%
1980	12.0%
2000	13.0%

It was a great sight to behold
Ruggie in the box.



It was a great surprise to Ruggie in

GGIE Lost the Game

By ERNEST C. DYE, D.D.S., Greenville, S. C.

Illustrated for ORAL HYGIENE by L. PAUL SCHWEINBERG



UGGIE BEAR received his name for the reason that he was strong and rugged, and his hair was thick and shaggy; he was quick in thought and action, was left-handed, and some of his classmates said that Ruggie was double-jointed.

Ruggie had a fondness for baseball. He had always pitched, and had developed curves and drop balls peculiarly his own. He was hard to "get on to" and very few batters could "find" him. Besides being the pitcher, Ruggie was captain of his nine.

He had pitched for the High School of Bruintown for four years, and his players had defeated every other High in the state except one—Ursusville. These two teams were "nip and tuck," and they had met to decide the championship of the state.

Ruggie was in love with Vodiska, a young lady bear of beautiful proportions. She possessed a shiny coat of gray hair, deep-set brown eyes and pearly white teeth. Ruggie was a jealous-hearted youth and had had several "scraps" about Vodiska.

This particular game was to be played at Bruintown. The weather was fine, and everyone was in the best of spirits; cubs were yelling "Honey-coated

peanuts, pop and lump sugar!" Bears of all descriptions from all over the state came hurrying to Bruintown, for it was noised abroad that this was going to be a great game.

The visiting team, Ursusville, was given the first inning, so Ruggie and his players quickly took their places in the field.

It was a great sight to behold Ruggie in the box. He would rotate or revolve his left arm so fast and furious, and move his body so strangely, that one would wonder how he could ever untangle himself and deliver the ball over the plate; but he did, and when the sphere left his hand it was only an instant before you heard the report in the mitts of "Whitie," the polar bear—in fact, it moved with such force that you could scarcely perceive it.

Three batters came up and "fanned" out; Ruggie's curves and spitballs were too elusive for them.

Such cheering you never heard as the teams swapped places. Ruggie cast his eyes in the direction of the grandstand. There was Vodiska, dressed in her best, radiantly beautiful and happy, smiling, and waving at him. "I'll win this game today or die trying," he said to himself, as he took his seat in the batters' row.

Cinnamon Bear was the first

at the bat. He swung three times and took his seat. Then came "Blackie," who did likewise. Ruggie made two mighty drives without effect, and on the third try knocked one which was caught by the center fielder.

Grizzly, the opposing pitcher, had heard of Ruggie's fame and was determined to show him that Ursusville had "somewhat" of a twirler also.

When Ruggie had reached the pitcher's stand he motioned for Polar, the catcher, and whispered something to him. Grizzly was the first up. He had been strutting about and showing the silvery tips of his hair for Vodiska's benefit, and also had been "making eyes" at her.

Ruggie was peeved. He threw one of his mysterious curves that landed on the tip end of Grizzly's nose (you should have seen Grizzly's eyes snap fire). It was done so quickly that the umpire failed to see it and Grizzly did not claim a base. He swung at the next one as if he meant to knock it to smithereens, but it fouled, tore open the grandstand netting, and crushed in the top of the straw hat of Dr. Bruin, the dentist. "My, but that boy has some steam! I think I'll move over a bit," said the doctor.

Grizzly hit the next one a fair blow. Old Cinnamon, the shortstop, jumped his full length upward and with outstretched mitt stopped it. The applause was deafening.

The game wore on. It had been pretty much of a pitchers' battle until the eleventh inning. The score was 0-0.

Ruggie had pitched a wonder-

ful game, but now he had a foreboding that all was not well. He felt himself slipping; he knew that he did not have the pep that he should have; something was wrong—he just could not tell what it was.

He shot the ball over. The batter would land on it, but Ruggie's faithful shortstop, Cinnamon, and his trusty outfielders would keep them from scoring. He called Polar to him and told him that he felt himself weakening. Polar did his best to encourage him. Ruggie, summoning all of his reserve energy, pitched them desperately. There were two bears on bases, and old Grizzly at the bat. An indescribable feeling came over Ruggie; he knew that the zero hour had come. He nearly tied himself in a knot the way he put the next one over. Old Grizzly, remembering his sore nose, determined to slay this one. He swung so fast and hit so hard that the ball was knocked, not only over the fence, but so far into the woods that it never was found. This brought in the two bears on bases and a home run for himself.

The bears from Ursusville started several fights. They made so much noise and raised so great a dust that the game was delayed until order was restored. Several of them from Ursusville who had become very boisterous were put out of the grounds by the bluecoats.

Ruggie's team had the last inning. Except with a few hits and bunts, it did not amount to anything. All was over. Ursus-

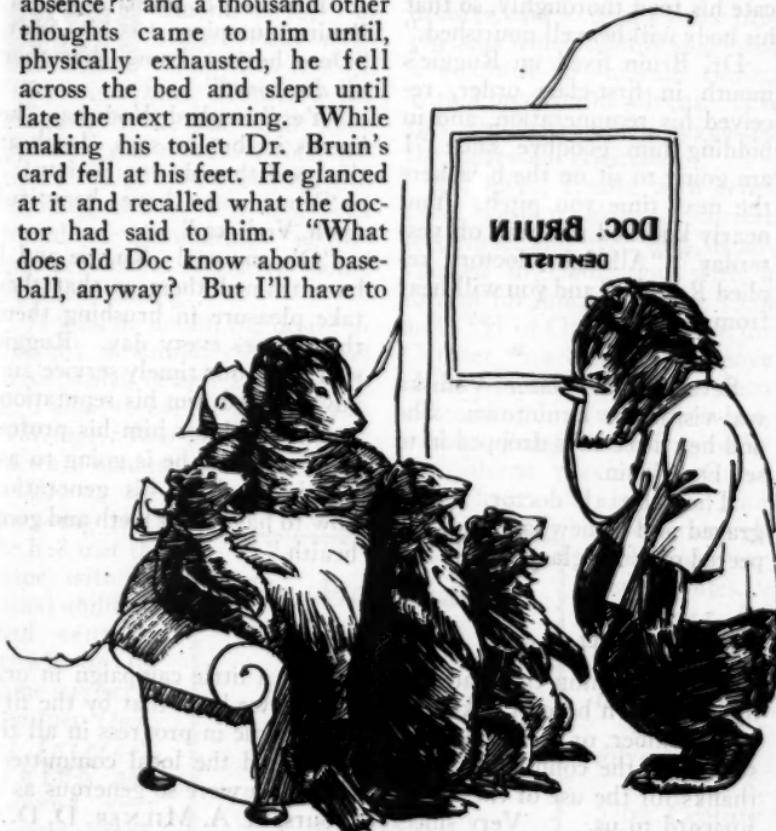
ville had won the state championship, 3 to 0.

Amidst the furore Ruggie, with bent head and downcast countenance, was slipping out of the side gate. Dr. Bruin, the dentist, tapped him on the shoulder while handing him his card, and said: "If you will come to my office tomorrow at 10 o'clock I feel sure that I can tell you why you lost this game."

Ruggie walked the floor of his room and ran his paws through his hair. "I wonder what Vodiska thinks now? What is Grizzly doing in my absence?" and a thousand other thoughts came to him until, physically exhausted, he fell across the bed and slept until late the next morning. While making his toilet Dr. Bruin's card fell at his feet. He glanced at it and recalled what the doctor had said to him. "What does old Doc know about baseball, anyway? But I'll have to

hurry if I get to his office by 10."

The good doctor was expecting him. With a warm grasp of the hand and a slap on the back, he said: "I knew that you would come. Here, have a seat in this dental chair." After a few moments of examination, he exclaimed: "Just as I expected! Ruggie, you have several decayed teeth and two badly broken-down six-year molars which I suspect have blind abscesses on them. I'll x-ray them and see." And he did. "These roots have pus at the tip ends, and the blood stream carries these germs



She and her three cubs dropped in to see Dr. Bruin

and lodges them in different parts of the body, which is weakening. That is the reason that you lost out at the crucial moment; your nerves were not functioning well on account of the pus and germs, and when the strain came it told on you.

"I will extract these two teeth, put you in bridges, fill these cavities, clean your teeth, and teach you how to keep them clean; then you will soon be in fine shape again. And remember this, Ruggie, no athlete can do his best work without good teeth and good gums. He must masticate his food thoroughly, so that his body will be well nourished."

Dr. Bruin fixed up Ruggie's mouth in first-class order, received his remuneration, and in bidding him goodbye said: "I am going to sit on the bleachers the next time you pitch. You nearly knocked my head off yesterday." "All right, doctor," replied Ruggie; "and you will hear from me again."

* * * * *

Several years later Vodiska was visiting in Bruintown. She and her three cubs dropped in to see Dr. Bruin.

The genial doctor, rather grayed and somewhat wrinkled, peered over his glasses while bid-

ding them have seats. "You don't remember me, do you, doctor?" "Yes, yes, your face is familiar to me, but I do not recall the name at the moment." "I am Vodiska, Ruggie Bear's wife, and look at these little Ruggie boys." "My, my!" exclaimed Dr. Bruin. "I should have known them; they are the image of Ruggie."

Vodiska related how Ruggie had pitched his way through college, how his team had won the state championship, and that he was now finishing his course in dentistry.

"Dentistry?" interrupted Dr. Bruin, jumping to his feet. "Does he not know that they *all die poor?*"

"Yes," replied Vodiska, "he knows it; but he says, 'Look at the good they do for Society!'"

"Your cubs have beautiful teeth, Vodiska."

"Oh, my yes! Ruggie and I have trained them so that they take pleasure in brushing them three times every day. Ruggie said that your timely service and advice saved him his reputation, and decided for him his profession, and that he is going to assist in teaching his generation how to have good teeth and good health."

Editor ORAL HYGIENE:

I am returning the plates you sent for a little campaign in oral hygiene down here in Aiken County, and we hope that by the first of December, or earlier, we will have a clinic in progress in all the schools of the county, and I wish to extend the local committee's thanks for the use of these plates which you were so generous as to forward to us. Very sincerely yours, G. A. MILNER, D. D. S.

Aiken, S. C.

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More

MUCIN FILM TESTS

By JULES J. SARRAZIN, D. D. S., New Orleans, La.

MY EXCUSE for reverting to "The Emetin Error," in connection with "The Mucin Film Test" in *ORAL HYGIENE* for August, is the fear that some dentists, and therefore their patients, might be misled into thinking that a way had been found of eliminating "elbow-grease" from effective home mouth-cleansing.

It was, no doubt, the desire to prevent a similarly dangerous error which caused Dr. Eugene S. Talbot to use the pages of the *Northwest Journal of Dentistry* to warn against emetin in 1915, while, at the same time, not knowing that he had met the issue with his usual ability, I had sent an article on the same subject to the then *Items of Interest*, which appeared very shortly afterward.

Emetin offered an easy road to heaven which would lead to disaster, and so does a home prophylaxis which mainly suggested a vigorous two-minute rinsing with a mucin film solvent. It is this similarity which suggested the digression criticized.

However, I note with relief that brushing with a correct technique, and even floss, is advocated in connection with a solvent for mucin on pages 1550 and 1551 of *ORAL HYGIENE* for October, practically to remove films which would have been softened, or partly detached, without being melted away by the solvent previously rinsed throughout the mouth, and forced through embrasures for two minutes.

Sugar in water would readily have melted away.

What is a solvent?

Vol. VII, p. 5764, Century Dictionary and Cyclopedia:

Dr. Bowman's
reply
follows

Dr. Sarrazin's
article.

Solvent, lat. *Solvare*, loosen, dissolve.

II. n. Any fluid or substance that dissolves or renders other bodies liquid; a menstrum. Alcohol is the solvent for resinous bodies and of some other similarly constituted substances; naphtha, oil of turpentine and ether are solvents of caoutchouc; aqua regia, or nitromuriatic acid, is the solvent of gold.

In the English sense, a solid or semi-solid substance is completely liquified. In the Latin sense, it may be "loosened" only. This may explain why a freshly extracted tooth *vigorously* shaken in a mucin solvent for two full minutes, after calculus removed, magnifying glass showing slimy surface, afterward rinsed in water, takes the Iodo-Glycerole stain.

I believe that *vigorous* agitation in a test tube to ascertain solvency is correct technique. No froth other than that caused by succussion was present. Sulphuric Acid C. P., gradually added to the tube half full of the solvent, caused no precipitate.

However, it may be that films had been "loosened" in the Latin sense, in which case the "elbow-grease" and thorough home prophylaxis technique would afterwards completely remove them, and, in which case, it would be as well to apply them from the start.

In thirty-seven years of practice, the last dozen of which devoted exclusively to periodontia, I have made a few tests, ever trying to guard against error. Of course, this does not claim infallibility.

Here is my last clinical procedure of tests always preceded

by prophylactic treatment, using the same mouths, that of thoroughly trained patients who have shown both the ability and a determination to maintain clean teeth:

Two weeks of a powder suited to the case, tape and brush, results tested by Iodo-Glycerole staining, prophylactic treatment repeated, followed by two weeks of mucin solvent, floss and brush, the solvent having been washed in the mouth, propelled by the tongue and cheeks for two minutes prior to "elbow-grease." Iodo-Glycerole testing at the end of the two weeks.

In all cases mucin film stains showed markedly more in quantity and intensity after the seasons of solvent than following those of a suitable powder used as dry as possible and supplemented by a tape, charged with powder as manufactured, to maintain approximal faces clean and polished.

A mouth wash capable of helping the treatment of gingivitis, congestive or suppurative, and of more advanced periclastic conditions, should contain iodin, tannin and formaldehyde. Such a wash, of course, is no solvent of mucin films, but stains them antiseptically in a manner more protective to gingivae than a delusive attempt at their removal chemically. In normal, or fairly healthy conditions, such stains are objectionable enough to rely on the "elbow-grease" removal of such films in preference.

In considering the value of any dentifrice we should not lose sight of the fact that mouths, habitually filthy, in which dili-

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gent and well-directed mouth hygiene is started, will show wonderful improvement under pure water as a wash. Such conditions do not allow accurate testing of any chemical or therapeutic properties.

The amelioration of sensitive necks of teeth depends ultimately on the eburnation of tubuli more than on the formation of secondary dentin. As a stimulus to the former the removal of films is useful, and they are usually located accessibly to brush bristles, but it would be preceded, at first, by temporarily increased sensitiveness.

It is usually on filth-covered

teeth necks that we do not meet with that sensitiveness, and it often appears as soon as the filth is removed, simply because the orifice of tubuli have been exposed. Of course, sensitive necks imply a greater or less degree of surface erosion.

It is really a sad condition that the general public, the poorer classes especially, who cannot afford the prophylaxis, or even the dental hygienist, and who do not even suspect their usefulness in the protection of mouth and health, cannot be supplied with a dentifrice so cheap and so pleasant to use as to become an enjoyment they crave and the "easy road to heaven" hoped for.

Dr. BOWMAN Replies

By GLENN F. BOWMAN, D. D. S., Pittsburgh, Pa.

ACCORDING to editorial custom, I have been permitted to examine the foregoing contribution from Dr. Sarrazin, in order that the closing arguments on both sides of the mucin solvent discussion might appear together in this issue of *ORAL HYGIENE*.

First of all, let me admit one thing that has always been frankly stated wherever I have spoken or written on the subject. I am not myself competent to offer the dental profession any unsupported clinical or other findings of my own with respect to mucin solvent. I am not competent because I am not disinterested.

My interest in mucin solvent, purely scientific at first, and my enthusiasm over the results I saw demonstrated, have led me to become active in promoting a dentifrice which depends on its mucin solvent properties for its efficacy. There has never been any concealment of this fact, and Dr. Sarrazin should be equally frank. It should be clear, then, that neither Dr. Sarrazin nor I can be looked to for disinterested opinions or reports in the matter of a mucin solvent. We are both alike ruled out because of the bias that we may be assumed to have, he in the one direction, and I in the other.

Dr. Sarrazin and I alike should, therefore, no doubt, fall

back on the disinterested findings of other professional men and scientists. In support of the declarations that I have felt warranted to make, I have offered, first of all, the certificate of the Mellon Institute, indicating that the product in question had been found to be "an efficient solvent of mucin plaques." Further, the chemistry of the mucin solvent is in accord with the works of Dr. Martin Fischer, of the Medical School, University of Cincinnati, and Dr. Jacques Loeb, of the Rockefeller Institute.*

But, not content with the laboratory and other tests of the Institute, nor with my own gratifying experience in using the solvent in my own practice, I submitted the liquid to twenty-five leading dentists in different parts of the United States, inviting them to select from six to twelve patients each and to conduct tests of the efficiency of the solvent for periods of 60 to 90 days. Many of these dentists used Iodo-Glycerole staining as a disclosing solution at the end of the tests and reported marked diminution of bacterial plaques.

The scientists of the Mellon Institute who were responsible for the successful research work leading to the discovery did not make any announcement of it, and I made no announcement until after the well-known dentists to whom the solvent had been submitted had reported their results.

* "Proteins and the Theory of Colloidal Behavior," by Dr. Jacques Loeb (McGraw-Hill Co.). "Soaps and Proteins," by Dr. Martin H. Fischer (John Wiley & Sons).

In a monograph on dentifrices, published at that time, I said that their observation of marked diminution of bacterial plaques "would seem to warrant the conclusion that the solvent, when properly used, will inhibit decay."

Now the readers of ORAL HYGIENE may decide whether to accept the favorable reports of these disinterested dentists or the adverse testimony of a single dentist, however eminent, who happens to be interested in another dentifrice. Better still, the reader may without difficulty verify by clinical tests of his own, the reports briefly summarized as follows:

CALCULUS.—Where calculus had been freely formed previously, the reports were unanimous, "calculus absent" or "an occasional soft module where the brush did not reach."

GINGIVITIS.—Appearance of mouth entirely changed. Where sores were habitually present, the typical inflammation and unsightly appearance had disappeared. In cases of erosion, as well as where dentine was exposed and sensitive from recession, patients quickly become more comfortable.

SENSITIVE TEETH.—One patient, selected because showing marked enamel atrophy, teeth sensitive, unable to eat acid fruits since childhood, was enjoying these long-forbidden foods within two weeks, and an annoying stain had disappeared.

EXTENSIVE RESTORATION.—In mouths carrying extensive restorations, the prosthetic pieces

were cleaner and the underlying tissues healthier.

ABSORPTION.—Where considerable absorption had exposed more or less of the roots, leaving areas difficult to clean, patients were quick to notice a feeling of cleanliness.

THICKENED GUM MARGINS in children and adults, invariably thinned down, the tone of the gums improved, and frequently the enamel took on a sheen-like high polish.

Almost two years have elapsed since these original tests were made and summarized, and ever since similar reports have been coming in from dentists in every section of the country who have conducted clinical tests for their own information; and Dr. Sarrazin's is the only discordant note in my entire collection. If he had reported the results of his tests two years ago, they would, at least for the time being, have caused me some uneasiness, but coming at this time I view them without alarm.

As to selection of patients, obviously no marked results can be observed in a normal, healthy mouth in the short period of a few weeks. Rather, patients should be selected who have bad pathologic conditions and who can be expected to use a dentifrice with reasonable skill and care.

Demonstrated "ability and determination to maintain clean teeth," which Dr. Sarrazin recommends as a basis of selection, evokes this comment. Such determination, carried out vigorously for years, by the alternative methods that Dr. Sarrazin

recommends, is quite likely to be destructive. Every observing dentist, in the course of his practice, sees frequent evidence of the harm done by too drastic application of abrasives on brush and tape.

Perhaps momentary attention should be given here to the method of using the mucin solvent and to Dr. Sarrazin's expression of "relief" because brushing is recommended. In March, 1923, Dr. Sarrazin wrote he had made a series of tests with mucin solvent, and in reply I wrote him on April 2nd, in part as follows: "We neither hope nor believe that it [mucin solvent] will dissolve food debris or other particles deposited on the teeth along with mucin, but we do believe they are readily removed *by the brush* after [mucin solvent] has exerted its solvent properties." Moreover, every bottle of mucin solvent is sent out with a label bearing plainly printed directions, reading in part as follows: " * * * with a portion of the [mucin solvent] still held in the mouth, *thoroughly brush the teeth.*"

It is disturbing, in view of these facts, that Dr. Sarrazin should so long have labored under a misapprehension, and should only now, after the point has at least three times been carried to his attention, discover "with relief" that "brushing with a correct technique and even floss are advocated."

I do not feel that the definition of the word solvent is especially important, and I am content to rest on the definition quoted by Dr. Sarrazin, particu-

larly his reference to alcohol as a solvent for resinous bodies, as this brings to mind the action of alcohol on gum sandrach, familiar to every dentist.

The Qualitative Test

If mucin-covered extracted teeth are vigorously agitated for two or three minutes in a test tube containing mucin solvent, removed, and sufficient acid added to the liquid used to acidulate it, a precipitate of mucin will be observed in the test tube *after it has stood sufficient time* for the mucin to settle. It is unfortunate that in the test which Dr. Sarrazin quotes he neglects to mention either the amount of sulphuric acid added or whether he looked for the precipitate immediately after adding the acid, both of which points are vital in determining the results of the tests. As indicated above, the precipitated mucin does not at once settle and, as mucin is soluble in strong acids, it must be apparent that if sufficient sulphuric acid be added to the liquid after the extracted teeth are shaken and removed from the test tube, the sole result would be to first precipitate any mucin that was in solution in the alkaline mucin solvent and then redissolve it in the excess sulphuric acid added!

Osmotic Pressure Important

To lay down the rule that "a mouth wash capable of helping the treatment of gingivitis, etc., should contain iodin, tannin and formaldehyde" is unfortunate. The habitual application of such irritants as iodin, tannin and

formaldehyde to normal mucous membrane cannot be too strongly condemned. It is, I believe, contrary to the whole trend of modern dentistry and surgery.

Instead of inhibiting cell growth by the use of irritants and albumen coagulants, we are learning to respect Nature's processes. A normal salt solution, for example, while it has little or no solvent effect on mucin or mucinous secretions, is used effectively by some of our most distinguished periodontists. The mucin solvent, having an osmotic pressure about like that of saliva, is as non-irritating as salt water. Because it is, moreover, an effective solvent, it has decided therapeutic value not alone in the mouth but in the nose and throat, and on burns and wounds showing mucinous secretions. Some of the results obtained in rapid tissue regeneration by the use of the solvent as a post-operative wash are startling.

For years we have been prescribing these irritating washes and abrasive powders and pastes, hopefully trying to check the ravages of decay and other mouth pathologies. Possibly the pastes and powders are not to be blamed altogether, for the average person's skill and determination to use them properly is a factor of great importance. It does not seem logical that an efficient mucin solvent, by first softening or loosening the mucin film, should make the task of efficient cleaning with brush and tape much easier, thereby to a degree overcoming the great disadvantage common to all pastes and powders dependent solely on

abrasive action. Is it to be wondered that the results of irritating washes and abrasive cleaners have been so discouraging to the vast majority of users? For these reasons, a great many scientists, including those connected with certain dentifrice manufacturers, have for years gone out in quest of the one thing that to all of them seemed to hold out the greatest hope—viz., a harmless, efficient mucin solvent. And now, since such a solvent has at last been found, is it too much to hope that every dentist will

attach sufficient importance to it and to the dentifrice problem, and see in it sufficient possibilities for good, to test the mucin solvent conscientiously in his own practice?

The writer has, especially in recent months, seen so much evidence of widespread professional interest in the subject as to convince him that universal recognition of the mucin solvent principle of cleaning teeth can be foreseen with the utmost confidence.

Pictures

Editor ORAL HYGIENE:

I want to thank you for your editorial in September ORAL HYGIENE which deals with the subject of "Pictures." Judging by my experience, we need cultivation along the line of art appreciation.

Some time ago it was my pleasure to see on display a really remarkable painting. It was a desert view. On a *mesa* overlooking a wide valley a horseman had pulled up to rest. He had pushed his *sombrero* back from his forehead as if hopeful that a breeze might come up from the valley below. The horse he rode had stretched its nose forward as if to relax the rein, while in the valley dimly could be seen the grazing herd.

In the distance, mountains of old rose piled their vastness against the sky, and down the valley slope heat waves seemed to shimmer. It was a vivid, inspiring thing.

Out on the street I met a *confrére*, and taking him into the building I pointed the picture out to him. In much the manner of a man who wonders whether or not it will rain before he gets home to dinner, he swept his eyes around the room without resting them upon any particular object and, turning to me, he said: "Doc, do you know that a fellow just shot a policeman a block down the street from here?" He did not mention the picture. I do not think he saw it.

After expressing sympathy for the policeman I excused myself and went away to smoke awhile.

WALTER S. KYES, D. D. S.

812 Watts Building, San Diego, Calif.

The Principles of ORAL SURGERY

By REA PROCTOR McGEE, D.D.S.



MAN has a right to attempt surgery of any kind until he has been in general practice for a period of from five to ten years, or longer.

The principles of oral surgery are exactly the same as the principles of general surgery, the only difference being the technique, which in this region is varied according to the peculiarities of the structure and circulation.

A surgical operation of any kind presents certain definite problems: First, does the patient require an operation? Second, is the doctor capable of performing the operation required?

It is only possible to know whether or not the patient requires an operation by making a thorough examination, general and local, and determining whether or not operative interference will be for the benefit of that patient. It is quite possible to have a patient whose local condition would indicate operation, but whose general condition would contra-indicate it.

It is also possible to have cases

in which the general condition may be alarming, due to focal infection, and in which the judgment of the operator may cause him to operate under most unfavorable circumstances in order to get a necessary and rapid result. The case may also arise where the diagnosis is made with good judgment and yet the diagnostician may have reason to believe that he is not capable of rendering the required surgical service in the very best manner.

In the region of the mouth and face we have two definite types of procedure; one is the operation which destroys tissue in order to eradicate disease, and the other is the operation which builds up tissue subsequent to the eradication of disease, or subsequent to the recovery of injury with deformity, or for the correction of congenital deformity.

So we have two distinct types of surgery—destructive and constructive. The great majority of surgical operations are essentially destructive operations in that they remove a portion or all of the organ for the purpose of disease eradication and in which, fortunately, Nature repairs the defects with very little deformity.

On the other hand, we have

*Read before the Richmond, Va., Dental Society, October 18, 1923.

The surgery of the mouth is real surgery and those who undertake this type of work assume the same responsibility as those who work in any other surgical field.

MOUTH SURGERY*

R. McG. D. S., M. D., Pittsburgh, Pa.

many cases in which it is necessary to transfer or possibly transplant, tissues to build up portions of the human anatomy that are lost. Essentially there is very little difference in the surgical procedure, because in both cases we must have as complete asepsis as possible, and we must have made a very careful examination of our patient, recording our findings before beginning the operation. Reparative operations are seldom, if ever, emergencies; consequently, they lend themselves more to study and definite plan than the destructive operations.

The anesthetic requires careful attention. Unfortunately, nitrous oxide plus oxygen has been heralded as fool-proof and the acme of safety. I do not believe that nitrous oxide and oxygen are either fool-proof or safer than other forms of anesthesia.

At once I hear somebody whisper that there is a lower percentage of fatalities under nitrous oxide and oxygen than under ether. That is quite true, but you must also remember that nitrous oxide and oxygen is given for a great many trivial operations that would never receive ether, even though there were

no other anesthetic than ether.

Do not understand that I decry the use of nitrous oxide and oxygen, but I do desire to call attention to the fact that there is no known anesthesia that is absolutely safe, and consequently those who give anesthetics in sufficient quantities must have their percentage of dangerous, and possibly fatal, cases, because the percentage always works out. So, when you give an anesthetic, remember that during the period of anesthesia you are holding the patient's life in your hands.

Block anesthesia with novocain or butyn is very satisfactory for operations upon the mouth and face in the office or hospital, particularly in the office. In cases of myocarditis, endocarditis and valvular lesions of the heart; also for those patients in which a long nitrous oxide and oxygen anesthesia is to be given, it is frequently desirable to inject the operative area either by the neuro-regional method or by the local chain method, so that shock from the operative region may be inhibited. The association of these drugs is well known.

Ether is the true surgical anesthetic, and I presume will re-

main so for many years to come. I have personally regretted the passing of chloroform and rather hope that the efforts of those who are urging chloroform-oxygen anesthesia may be successful.

I believe that we take far too great risks in operating upon serious cases in the office. These days are not the days of our fathers, and the assumption of risk that is placed upon us is very much greater than the operator was expected to assume a few years ago.

I remember when I first began sending completely impacted third molars and impacted cuspids to the hospital for operation, I was very severely criticized by the dental society for exaggerating the importance of the operative risk, but I find that criticism for sending patients to a hospital where there is liable to be a considerable shock or reaction is growing less, and that the patients themselves feel safer in the hands of an operator who will carefully weigh the problem in his mind and advise them in the light of his experience.

Sterilization of instruments and field of operation is exactly the same with mouth and face cases as with any other part of the human body. So far no sterilization method has been found that is perfect. A few years ago we thought that carbolic acid was the acme of sterilization, then we reached the conclusion that whatever was boiled was sterile, and now we know that carbolic acid is not very useful, and we know that sterilization by boiling is good only if a suf-

ficient temperature is maintained over a sufficiently long period.

It seemed to me that the fact that we boiled all of our dull instruments and sterilized our sharp instruments by placing them in alcohol or lysol would indicate that steam cannot be universally applied. The nature of steel requires us to be careful in the maintenance of our cutting instruments. Now we know that the normal spring and liveliness of our larger instruments is interfered with by constant boiling.

The knife is the pioneer of the surgical set. It goes the furthest into the tissue. If infection is carried the knife carries the infection the furthest, and yet we are able to sterilize with reasonable satisfaction by immersion in a chemical. Is it not also reasonable to sterilize our other surgical instruments in the same way and thus retain their temper and their finish?

I have pursued this method for some years with great satisfaction, particularly in skin, bone and cartilage graft cases where asepsis is necessarily more urgent, if possible, than it would be in septic cases.

The handling of traumatized circulation in the oral region is exactly the same as the handling of trauma to circulating vessels in other regions. The checking of hemorrhage, the tying off of vessels presents no difference. The original line of incision presents no difference. The after treatment of surgical conditions, both general and local, is very similar to the treatment of general surgical cases. In fact, in

the hospital the surgery of mouth and face is more closely united to the procedure of general surgery than is the surgery of the eye, ear, nose and throat.

It would, therefore, seem that those who undertake the more extreme operations of cleft palate and hare lip and facial deformities, neoplasms of the mouth, fractures of the jaw, injuries to the tongue, operations of the glands of the superior triangle of the neck, Ludwig's angina and all of the myriad pathological conditions of the mouth and face would require for their proper execution a man who had received training both in general surgery and in the particular specialty of the mouth and face.

One of the most difficult things that we are called upon to do, and which requires very careful judgment in my experience, is the handling of the fractured mandible. The mandible is more exposed to trauma than any other bone and, so far as the movable bones are concerned, is probably of the greatest importance to the welfare of the individual. The problem of splinting is more complicated than is the problem of splinting any other bone in the body.

We have two general methods of handling fractures of the jaw—the various forms of inter-dental splints and open reduction; in some instances a combination of both.

The first consideration in a fractured mandible is the location and number of fragments. If the fracture is multiple, it is quite likely that there will be

an interference with respiration, which will require an immediate fixation of the submerged segment. The next consideration is whether or not there are teeth in the line of fracture. It is utterly hopeless to attempt to retain teeth that are caught in the line of fracture. An x-ray should be made, whenever possible, before any operative measure is begun. The methods of inter-dental wiring are now greatly in vogue, and in simple cases, provided there is no tooth in line of fracture, are all that will be necessary.

Where the fracture is multiple, or where a single fracture occurs in such position that the muscle pull prevents the retention of the fragments in their proper position by means of wiring, it then becomes necessary either to use some form of inter-dental splint, with or without outside support, or to do an open reduction with silver wire sutures.

Where an open reduction is performed, it may be necessary, or desirable, to use in addition an inter-dental splint, or to resort to wiring methods. In those cases in which there has been a faulty union with the fragments pushed past each other it is sometimes feasible to use the methods of the orthodontist to force the fragments into their proper position.

I am rather inclined to think that the principles involved, and in many cases perfected during the War, will remain the basic principles of fracture practice for some years to come.

It is my experience that silver

wire sutures must always be removed. Where the silver wire suture is placed there must be at least a slight tension. Any tension upon a silver wire suture will cause resorption of bone in the region of the suture. Where the tension is great resorption is very rapid.

By means of x-ray pictures, taken at moderately frequent intervals, I watch very closely the condition of the bone, both at the point of fracture and in the region of the silver sutures, and as soon as resorption is sufficient to indicate any weakening of the mandible from that cause I remove the silver sutures.

Bone graft is desirable only in those cases in which there is considerable loss of tissue that cannot be overcome, either by extension of the posterior fragment forward, or by a slight alteration of the occlusion through taking up the space by forcible approximation.

Three types of graft are commonly used, the sliding Pedicle graft, the Rib graft and the Iliac graft.

I no longer use the Ostell periostial graft. Where there is a considerable comminution of tissue, all of those bone fragments that remain firmly attached to the healthy periosteum will act as centers of ossification in the repair of the jaw. In these cases it is possible to use the open reduction method; consequently, it becomes necessary to construct an inter-dental splint with an outside brace to hold the tissues in position.

The principle upon which all inter-dental splints with outside

braces are constructed is the principle upon which the human hand operates when it holds a jaw in position. The nearer you make your splint act like your hand the better results you will get.

In almost all fractures of the jaw it becomes necessary, sooner or later, to make an outside stab wound for drainage. If these incisions are made well under the line of the mandible they will be very inconspicuous; in fact, in many cases they practically disappear within six months.

Un-united fractures must always be repaired by open reduction, because it is necessary to freshen the ends of the bone and to remove the cictricial material between the ends of the fragments. No amount of pressure will cause a complete resorption of this cicatrix, and in addition the proper freshening of the bone ends; consequently, it must be done with an instrument.

The instrument that I use for this is a file similar to those which are used to enlarge the opening from the nose into the frontal sinus. In making the opening for silver wire sutures through the bone I use a 3/32-inch twist drill in a carpenter's automatic hand drill. This drill can be taken apart and sterilized very easily and reassembled on the operating table. It saves a great deal of time and trouble and is very prompt in its action.

When the pathological condition present requires the removal of all of the teeth, in either or in both jaws, we have facing us a surgical operation whose importance has for many years been

minimized both by the patient and by the dentist.

If you will consider for a moment the great resistance of the tissues of the face and jaws to infection, the very rich blood supply and the fact that the teeth are supplied by two branches of the fifth nerve, which gives sensory branches to nine of the twelve cranial nerves, and which is in very close contact with the pneumogastric in the floor of the fourth ventricle, you will realize that such an extensive operation in this region is attended with a probability of a very considerable shock.

These considerations have led me to consider the removal of ten or more teeth in any one jaw as a preferable hospital operation. Understand, I do this in my office, but under protest. Where it has become necessary to remove a large number of teeth we have present either a serious and wide-spread pathological invasion of the surrounding bone area, or we have a very marked deviation from the normal in the position of the teeth, particularly in cases of protrusion.

The question of alveolectomy, or the same operation under any fancy names that have been invented for it in recent years, becomes a part of our consideration.

If we remove many infected teeth and we do not remove the outer alveolar plate, we require our patient to use human energy and vital processes to break down this no longer useful tissue, dissolve it, resorb and eliminate it. The energy required

during this process is very great; it covers a long period of time. The slow removal of the alveolar process allows the face to fall in, the expression to be changed, personal pride to be injured, to say nothing of the permanent injury to the digestive tract through inability to chew food.

It would seem logical to very carefully raise the muco-periosteum after extensive extraction and carefully remove the outer plate, which is usually thin and ordinarily is the principal seat of attack from the pus that has been flowing from the apices, or sepsis that has been taken up from pyorrheal pockets.

If this process is properly removed and the bone area is perfectly smoothed and filed and reduced to a shape that is conducive to the wearing of an artificial denture, and if all of the granuloma are curetted away and the margins of the gums trimmed properly, and then the soft tissue consisting of mucus membrane and periosteum are carefully sutured over the newly-made alveolar body, we will have saved our patient a great deal of energy and resorption, we will have removed infected tissue, we will have enabled the patient to have an artificial denture placed within ten or twelve days, and we will have saved this patient from the impending loss through lack of use of many of the glands of the stomach and intestines that contribute to digestion. Alveolectomy is a worthwhile operation when it is performed with the proper judgment and proper skill.

Osteo-myelitis of the jaws,

particularly of the mandible, is becoming a more frequent condition in practice; the younger the patient the more serious the condition. Osteo-myelitis in children under six years of age is frequently fatal.

In all cases in which there is a swelling, in or about the jaws, of more than one week's duration in a young child, we are justified in warning the parents that the condition is serious. We are not justified in taking out a tooth, whether it be temporary or permanent, if the swelling has lasted more than a week, unless we have a definite understanding with the parents or guardians that the removal of the tooth may not eradicate the disease. In two cases I have seen the entire lower jaw from one ascending ramus to the other totally destroyed following the extraction of temporary teeth. Whether the extraction was judicious or not I am not prepared to say, but we do know this, that these cases in young children are of very rapid growth, are very destructive and very commonly fatal.

In older patients the progress of osteo-myelitis is usually not so rapid; in some cases it may be very slow. There was a time when we divided this disease into osteitis, periostitis and osteo-myelitis. We now consider, for clinical purposes, that these diseases are simply the various stages of one condition.

I have seen severe osteo-myelitis in jaws in which no teeth have been extracted, and I have seen severe osteo-myelitis following very closely upon the extraction of a tooth. It is my

opinion that the extraction of a tooth is never the actual cause of osteo-myelitis. I believe that the jaws become infected, probably through the agency of the teeth, but that infection has become firmly established in the cells of the bones long before symptoms of local dental trouble arrive.

A diagnosis is made by the extreme loosening of the teeth, swelling, exudation of pus and the mottled appearance of the x-ray. Very early in osteo-myelitis of the mandible there is also infection of the sub-maxillary and occasionally the sub-lingual glands, and frequently the lymphatics of the neck anterior to the sterno-mastoid muscle becomes involved. If unchecked the tendency is oedema of the glottis and pyemia. The temperature is usually from 102 to 103½; in children, frequently reaching 105, pulse of from 100 to 140, prostration and general weakness.

The indicated procedure is an ether anesthetic, extraction of all teeth that have been loosened, the removal of infected bone from the area of extraction, make an incision under the margin of the jaw, then make a complete blunt dissection through the bone area, through the pus area, which is usually found in the region of the sub-maxillary fossa, continuing the curettage through softened bone, usually into the apices of the bicuspid or the molar alveoli.

All of the dead bone and debris must be removed and a through-and-through rubber tube drainage sutured in place.

At this time I commonly suture up the outside incision, leaving the incision open on the inside of the mouth where the teeth have been removed.

The patient is kept in bed, a mouth wash of hot normal salt solution is used hourly, hypodermic of morphia 1/6 or heroin 1/12, if there is considerable pain, ice-bag to the face and internally whatever medicine may strike you at the moment as doing the most good.

While I must say that my faith in internal medicine is a little weak, I invariably administer whatever seems to me at the time to be indicated, on the theory that if it does no good it certainly will not do any harm.

I do not irrigate through the rubber tube. A tube is always cut spirally, so that the slightest motion will cause it to promote the flow of any fluid that may be in the region.

Ordinarily, on the third day the suture can be clipped and the tube removed, but these wounds will require attention for from three to six weeks after operation, provided the infection is a staphylococcus, which it usually is.

The scar from the external incision is in most cases very inconspicuous.

In diseases of the maxillary sinus we come into close association with the work of the rhinologist; in fact, the maxillary sinus is the No Man's Land between the stomatologist and the rhinologist.

The sinus may be infected from the nose and contiguous sinuses, from blood stream, from

retained secretion and from the teeth. Probably 50 per cent of all infection in maxillary sinuses is due to oral conditions. No other region has so many changes.

In each antral area five temporary teeth develop, move through the tissue into the floor and reach normal positions in the mouth. These, in turn, are followed by the development and movement into position of eight permanent teeth.

After the eruption of the permanent teeth the sinus area develops into a sinus. If there are impacted cuspids or bicuspids, and in many cases upper third molars, the complication is increased.

Each antral floor has been punctured by thirteen teeth, and as time goes on have been traumatized by the removal of five temporary teeth, and often by the removal of one or more permanent teeth, it would be strange, indeed, if the floor of the antrum were not frequently the source of infection.

I am coming to believe that rapid orthodontic movements of the teeth in early years contribute to the death of the pulp in the second molars, sometimes before the eruption of that tooth is complete—at other times after the eruption of the tooth.

Diagnosis of apical sepsis in the second molar is sometimes impossible by means of the x-ray, because in those cases in which the root of the tooth extends into the maxillary sinus and is not covered with bone there is nothing to rarify, so the x-ray has nothing to show. Diagnosis in these cases can best be made

by means of the high frequency current.

The point of entrance that I believe is most satisfactory is through the canine fossa, because from that position it is possible, with the aid of the head-light, to see the entire inside of the antrum. I do not believe the antrum can be cleansed and polyps and necrotic tissues removed unless the operator can see what he is doing. The objection to this route is the fact that the antrum temporarily communicates with the mouth, but the advantages are so great that this one objection does not outweigh them.

Where there are polypoid growths that have been established for any considerable time, it is my experience that the inci-

sions must be kept open and these growths removed a number of times before the antrum will remain clear. Where there are no polypoid growths it is frequently possible to close the antrum at the time of operation.

With many of us, oral surgery has merged itself into maxillo-facial surgery. This work takes in the surface of the face and the upper triangles of the neck, as well as the mouth and its surrounding structures.

The whole object of this dissertation is to indicate the fact that the surgery of the mouth is real surgery and that those who undertake this type of work assume the same responsibility as those who work in any other surgical field.

A Correction

My Dear Doctor McGee:

I should like to correct a misstatement made in the November issue of *ORAL HYGIENE*. In the article on the sixty-fifth convention of the American Dental Association the motion-picture program was given listing the Massachusetts Department of Public Health with "Mouth Hygiene" or "Your Teeth." While we had some correspondence regarding the oral hygiene film, "Mouth Hygiene," owned by this department, the film was not shown at the convention, as we were told that a newer film, "Your Mouth," by the same author, Dr. Edwin M. Kent, was to be shown. I notice that the same error occurred in the program of the American Dental Association, and wish to take this opportunity to correct both statements.

Very truly yours,

EVELYN C. SCHMIDT,

Health Instructor in Mouth Hygiene.

Boston, Mass.

Industrial Dentistry

By E. L. PETTIBONE, D. D. S., Associate Editor, Cleveland, O.

THE last fifty years have been spent in perfecting machinery, but the next fifty years must be spent in perfecting the human machine."

The foregoing statement was made a decade ago by a leading manufacturer, and is being realized by more and more employers each year. This process of perfecting the human machine leads eventually to the establishment of a plant dental dispensary.

Usually the dental dispensary follows very closely the establishment of the plant medical dispensary, and it makes a very useful adjunct of the medical dispensary. The clinics are operated along very different lines, but all with the same general idea—that of co-operating with and supplementing the efforts of the medical department.

In the industries there are now four classes of clinics:

First—Those wherein the company hires the dentist to do the examination and prophylaxis at the company's expense, and he refers the employee to the ethical practitioners of the city for dental work.

Second—Those wherein the

company's dentist examines the teeth of all employees and does necessary prophylaxis, and then will do the necessary dental work "at cost," which is about the cost of material used.

Third—Those wherein the company pays all the cost of first-class dentistry for all employees.

Fourth—Those wherein the company hires a dentist to care for the teeth of the children of employees.

Some firms start with a dispensary of the first class—probably partly as a show affair or as a "welfare" feature; but it soon comes to their attention that the average workman spends about \$50.00 a year for dentistry, too often to a charlatan who leaves him in a worse condition than before he started. This leads them into doing the work at the plant. Most of the employers soon realize that as an efficiency factor alone the dental dispensaries are worth while. If an employee has an hour appointment with a dentist, very often he or she will take a day off, which means an idle machine for the day, the employer losing much more than the employee loses.

Twenty-five per cent of the

men in factories today can have their efficiency increased by having their mouths put in good condition. How do we know? Because we examined the mouths of hundreds of the 21-31-year-old men of the draft, and what did we find? Twenty per cent of their mouths in a terrible condition—foul, neglected, nothing ever done to keep them healthy. Ten per cent more needed fillings to keep them comfortable.

So my twenty-five per cent is very conservative, because factories have all the men working in them that Uncle Sam turned down because they did not have at least twelve teeth—three in front above that struck three below, and three at the back above that struck three below. In addition to these, they have all the older men and, as a rule, their teeth would not be as good as those of the younger men.

Many of the factories are now demanding a dental examination, with the medical, for all who seek employment. In some factories the applicant is employed only on condition that the teeth be put in good condition within six months from date of employment. At the end of six months the employee is recalled for another examination. If he has not met the dental requirements and cannot give a reasonable excuse for not having done so, he is immediately listed for discharge. If his excuse is reasonable, the time is extended.

The first industrial dental dispensary was probably a dental clinic established about thirty years ago by the Barber Match

Company at Barberton, adjoining Akron, Ohio. This was established to protect employees from phosphor-necrosis of the jaws. Examination of the mouths of all employees was compulsory, and an employee was not allowed to continue work when even a slight dental defect was found until it had been remedied. This not only checked the phosphor-necrosis, but it was found to be very satisfactory from a health and efficiency standpoint.

There are now nearly two hundred industrial dental dispensaries in the United States and Canada, and they are not confined to any type or class or group of employees. They are to be found in all kinds of industries employing all kinds of people. Neither are they confined to any particular section of the country, but are found in all sections. They must be successful and must help to pay the stockholders dividends, for they have been continued for many years in some of the plants, and stockholders do not usually allow their managers to continue anything very long that does not favor their dividends.

Probably few of our readers realize how many employers have realized the importance of industrial dental dispensaries as not only an effective measure, but as a means of keeping down the labor turnover. Most of these employers now realize their advantage as a means of improving the general health not only of the employees, but of the family of the employees, by

means of the message taken home.

The larger employer of labor not only realizes his obligation to the community in which he is located, but he realizes that the community must in a larger measure furnish him his additional labor when his business grows and, further, the youth of today is his potential employee of the very near future.

This has been recognized by some employers, and to that extent they have assisted financially in the establishment of dental clinics in the public schools of their cities. Other employers, reasoning a man who has lost a part of a night's sleep because of his child's aching tooth is a poor employee, have been influenced to establish a dental clinic for the children of their employees. Such a clinic led to the wonderful dental clinics in McDowell County, West Virginia, where school children's teeth are cared for by a tax levy.

Contrary to the ideas of those dentists who have been opposed to the plant dental dispensaries in their cities, the industrial dental dispensary has not only been a wonderful help to the communities where they have been tried, but have been a wonderful help in every way to the dentists of the community.

There is one thing that every dental director I have ever met stands for first and foremost, and that is *education*—preventive dentistry. That is the main object of them all, and this educational work, going to the head of the family, or a family wage-

earner, goes home as a message to be heeded, with the result that the rest of the family are better patients for the community dentist.

The plant dental dispensary has made the community dentist a better dentist, because he knows that any work done for a plant employee is checked up by the plant dentist. Most plant dispensaries have started out doing examination and prophylaxis and making recommendations for such reparative work as is needed. As a result some of our older, influential professional brothers have been compelled, too, to modernize their operative procedures by the alluring comparison of the methods of the high-class man operating at the plant. You will universally find that the plant dentist is an active member of the dental society, believes in teaching mouth hygiene and is progressive. That's why we are for him.

The writer has been an active mouth hygiene worker since the work started. At first it was thought that we should concentrate our efforts on the child. The Oral Hygiene Committee of the Ohio State Dental Society made a study of industrial dentistry, and as a result of that study we issued a call to all those interested in industrial dentistry to meet with us on Wednesday, August 7, 1918, the week of the meeting of the National Dental Association in Chicago, and at that time organized the National Association of Industrial Dental Surgeons. The object of this organization is the

advancement of industrial dentistry. Our association therein has been so pleasant that we enthusiastically continued it. At the last meeting of this organization, held Wednesday of the week of the American Dental Association meeting in Cleveland at the Hollenden Hotel, the following officers were elected:

President, Dr. Homer M. Brewer, National Cash Register Company, Dayton, O.

Vice President, Dr. R. L. Humphreys, International Harvester Company, McCormick Plant, Chicago, Ill.

Directors, Dr. E. S. Arnold, Travelers Insurance Company, Hartford, Conn.; Dr. W. J. Ream, Goodyear Tire and Rubber Company, Akron, O.; Dr. E. E. Belford, National Lamp Company, branch of General Electric Company, Nela Park, Cleveland, O.

Secretary-Treasurer, Dr. E. L. Pettibone, 6503 Detroit Avenue, Cleveland, O.

The leading dentists of the community have been compelled to brush up some, too, especially by modernizing their equipment. The employees, especially the office force, of a plant having a new dental dispensary are always very proud of the new dental dispensary, especially the most visible part — the equipment —

and the outside dentist sometimes has some very embarrassing comparisons presented to him, which result in his modernizing his equipment.

We want every reader who has any influence in his community to use that influence to teach mouth hygiene, and if you have any influence with employers of labor we want you to exert that influence for the betterment of the employees in the way which you know to be the most beneficial—that is, by encouraging the establishment of an industrial dental dispensary, because this plant dental dispensary is the greatest way to reach the adults of today with our mouth hygiene message.

If you can interest an employer in industrial dentistry you can obtain help and co-operation from **ORAL HYGIENE**, from the Council on Mouth Hygiene and Public Instruction of the American Dental Association, from the National Safety Council and from the officers and members of the National Association of Industrial Dental Surgeons.

SEE WHAT YOU CAN DO FOR THE WORKERS OF YOUR CITY!

1923 Annual Index to **ORAL HYGIENE**

We are now printing a limited number of copies of the Annual Index to the 1923 volume of **ORAL HYGIENE**; these are for gratis distribution.

The Annual Index carries a title page and is adapted for binding with copies of **ORAL HYGIENE** itself.

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Editorials

REA PROCTOR McGEE, D.D.S., M.D., *Editor*
212 Jenkins Building, Pittsburgh, Pennsylvania

Minus 45 Per Cent?

WE ARE not playing politics, but there are certain things that are occasionally mentioned in which, as tax-payers, we are very particularly interested, and the most certain of them all is the suggestion of Mr. Andrew W. Mellon, Secretary of the Treasury, that income taxes on incomes which are the result of the personal effort could very nicely be reduced forty-five per cent.

If you would like to have your income tax reduced about forty-five per cent, it might be a good thing for you to write to your Senator and Representative, also to Mr. Mellon, and endorse the proposal of reduction of income tax. This is really an important suggestion because Congress and the Senate have their ears to the ground upon those subjects that appeal to their constituents, when the constituents either write or telegraph, they will usually vote favorably.

If there is one thing we do want, it is less taxation.

What is the Answer?

THE demand for dental services is increasing much more rapidly than our ability to satisfy the demand is increasing.

The various states are adopting programs of mouth hygiene, as a part of their public health campaigns, that will be of great benefit providing the dentists are able to supply the man-power to handle the work.

In comparatively recent years we have increased the length of the course from two years to five years. Our students are older when they take up the study of dentistry; they spend more than twice as much time as formerly in school and the consequence is that with fewer colleges and fewer graduates the active practicing life of each graduate is shortened.

The increase in the population is far out of proportion to the increase in the number of dentists and the demand for dental services is so much greater than the increase in population would indicate that even without wide-spread hygiene movements, we would be unable to take care of all who apply for services.

The demand for mouth hygiene as an integral part of general hygiene must be met. We can only do this by having assistants who are trained for the particular purpose of public health work.

To a very small extent this has been partially accomplished through the development of the dental hygienist. Her work, however, is limited to the demands for expert clerical assistance, plus prophylaxis, in handling the mouths of great numbers of school children.

Prophylaxis is of great value but it is not sufficient because temporary teeth must be properly preserved with plastic fillings. The dentist has only two hands with which to work, and, regardless of his mental ability, wide judgment, high training and professional skill, the number of patients that one man can handle is extremely limited.

If it were possible to have a corps of assistants who were trained in prophylaxis, plastic fillings, possibly in minor extraction and in the necessary clerical work, it would be comparatively easy for one highly-educated dentist to administer the work of a very large number of assistants, who would be, to all intents and purposes, half-educated dentists.

This would necessitate a system of partial licenses—that is a license to practice so far and no further.

This would also open the way toward the acquirement of the right to take impressions by laboratory men which, in turn, would result in prosthetic laboratories where the edentulous patient could walk in, sit down, have the impression

made, the teeth fitted and walk out again with a complete artificial denture.

You must also realize the fact that in training these various assistants we are breaking up the profession of dentistry into the real dentist and the half-dentist, or the quarter-dentist, or the sixteenth-dentist—whatever the degree of dentistry to be practiced. This would mean that before very long there would be more of these half-baked practitioners, in fact many more of them than there would of the truly educated, graduate dentist.

This is a country of politics and if our assistants, recognized as such, were far more numerous than the dentist himself, it would be only a short time until by organizing the vote of the assistants they could take the matter in their own hands and get a license to practice whatever part of dentistry they might choose, regardless of their qualifications.

Some method must be found by which we can get more real assistants in handling large numbers of people.

In the last few years we have had a very great example of the inability of our local, state and National governments to enforce the laws. If we have greater complication in dental laws than we have at present I am unable to see how it will be possible to enforce regulations, even though they may be strict in regard to the practice of a limited dentistry.

It is entirely probable that if a limited license is issued it will, in a short time, be stretched to cover the entire range. But we must take care of the mouths of the children of the schools in rural districts and cities. How are we going to do it?

If you have any constructive ideas as to how this emergency is to be met, the Editor of this magazine will welcome your suggestion, and in the hope that we may have suggestions from all parts of the United States this editorial is written.

The Petry Case

 HIS transcript from the record in Superior Court of Pennsylvania in the case of illegal practice of dentistry is very interesting because the Superior Court of the State upheld the local court in enforcing the law as passed by the legislature.

An appeal was then taken to the Supreme Court of the United States, and, so far as we are aware, this is the first time that the Supreme Court of the United States has considered an appeal on the dental law regarding the illegal practice of dentistry. In this case the Supreme Court of the United States refused to take jurisdiction, which means that after consideration of the case, the findings of the Superior Court of the State were upheld.

We are presenting the transcript because of its general interest to those throughout the country who are active in the enforcement of dental laws, and also in order that they may call the attention of their attorneys to the precedent established by the Supreme Court of the United States in this class of cases.

The work of the attorney for the State Board of Examiners was extremely conscientious and was far beyond any fee that he could be paid for his interest in the matter. The dental profession throughout the country should congratulate Mr. Louis Caplan of Pittsburgh for his very able presentation and very earnest prosecution of the matter to its ultimate judgment.

In presenting this case our whole interest in the matter is in the principle involved and not in the personality of the man who was the defendant. We always feel that it is tough enough to be a defendant without being a defeated defendant; but in all lawsuits somebody has to get licked. So there you are.

Here is the transcript:

In the Superior Court of Pennsylvania

Sitting at Harrisburg

COMMONWEALTH OF
PENNSYLVANIA

v.
JACOB PETRY.

TREXLER, J.

{ No. 103 April Term, 1923.
Appeal from Q.S. of
Allegheny County.
Filed April 18, 1923.

The defendant was charged with having unlawfully engaged in the practice of dentistry without having first duly qualified

and registered as a practitioner in dentistry and without having first obtained a license as required by the act of 3rd of May, 1915, P.L. 219.

The act has this provision "This act shall not affect the right of any person to practice dentistry who is entitled to do so under the provisions of an act of assembly in force or who shall have conducted the actual lawful practice of dentistry in this Commonwealth for five years continuously preceding the passage of the act." It was admitted by counsel for defendant that the defendant was not at any time licensed to practice dentistry by any official body of the state and that he never filed any license or any affidavit as to the practice of dentistry in the proper office of the county in which he practiced. Clearly the only way that the defendant can escape the provisions of the act is to show that he lawfully practiced dentistry for five years preceding the passing of the act. The defendant seeks to prove this by reference to the act of July 9th, 1897, P.L. 206. Defendant started to practice dentistry in Pennsylvania in 1895, but failed to comply with the act of June 20th, 1893, P.L. 441 then in force. The act of 1897 provided that it take effect on October 1st, 1897 and defendant contends that in the interim between July, 1897 the date of the act to October 1st, 1897, he was lawfully practicing dentistry, as there was no act in force during those months. The act of 1897 repeals all former acts and in the 13th Section provides that it shall not be lawful for any person in the state of Pennsylvania to *enter upon* the practicing of dentistry unless he has complied with the provisions of this act. Defendant's argument is that as he did not *enter upon* the practice after the passage of the act of 1897, he was lawfully following his profession as there was then no law applying to him, the former acts as we have already stated having been repealed. Having practiced lawfully from July to October 1897 and thereafter for a period of more than five years, he says he comes within the exemption contained in the act of 1915 under which he was indicted.

It will be observed that defendant's case depends upon the construction of the words "enter upon" in the act of 1897. We do not think that the intention of the legislature was that the act should apply only to those persons who should begin the practice of dentistry. It is true that the words "enter upon" usually have that significance but the intent of the act should be taken from its entire contents. The act provides that it shall not be construed to prohibit the practice of dentistry by any practitioner who shall have been duly registered in accordance with the laws of this Commonwealth existing prior to the passage of this act, and in another place, that the act shall not affect any person who has the right to practice dentistry under the acts of assembly in force, or who shall have conducted the actual, lawful practice of dentistry in this Commonwealth five years continuously, preceding the passage of this act. These provisions would be meaningless if we would hold that the act applied only to beginners in the practice of dentistry.

There are similar provisions in the laws of Illinois and Michigan. In the former state the court has this to say in construing the words "shall begin the practice of dentistry," "The act clearly provides a penalty for any person practicing dentistry unless previously licensed and to hold that the Legislature by the use of these words 'shall begin' intended to grant immunity to persons who had practiced dentistry unlawfully prior to and at the time the act took effect would be wholly unwarranted and a very narrow and technical construction." The court, therefore, held that the words "shall begin" are applicable to one who continued after the act took effect, the illegal dentistry previously begun. In *Hooper v. Baldorf*, 141 Michigan 353, 104 N.W. 667, in reaching the same conclusion, the court states "It is more reasonable to say that such a man is a beginner for the purpose of making such an application not being already a lawful practitioner." Our own court is committed to the same view for in *Commonwealth v. Campbell*, 22 Pa. Superior Court 98 a case arising under the act of May 18th, 1893, P.L. 94 forbidding anyone to "enter upon the practice of medicine" Judge Smith speaking for the court stated "The gist of the offense is the practice of medicine and surgery by an unregistered and hence presumptively, an unqualified person. If an indictment will lie only for beginning such practice, the statute may be disregarded with impunity after the statute of limitations has closed on the initial offense." We think the lower court properly concluded from a general reading of the act, that it was not the intention of the legislature to have the act apply only to those beginning the practice of dentistry.

The counsel for the appellant claims that the court exceeded its authority in its instruction to the jury in a case of this kind in that it stated that "if the defendant practiced within the last two years as alleged in the indictment and he practiced without a license and was not registered, it is the duty of the jury to return a verdict of guilty. The laws are laid down by the legislature, and it is the duty of those who are practicing dentistry to comply with those laws. It is not a privilege of the court to set them aside, nor the privilege of the jurors. The defendant here has admitted that he practiced within the last two years. He has further admitted that he has not been licensed and has not registered; and we think under the law that it is the duty of the Court to say to you that you shall return a verdict of guilty as charged in each of these indictments.



Dental Diplomas While You Wait!

FAKE medical diploma mills have been working overtime lately and several states, particularly Connecticut, have checked up on their state boards and are already prosecuting illegal practitioners who have purchased degrees from fake institutions, most of which seem to be located in the Middle West.

In checking up the illegal practitioners in New York City, the Associated Press claims that over five hundred fraudulent dentists have been uncovered, and that, in the city of New York alone, it is quite possible there may be as many as fifteen hundred. Many of these are persons who pretend to be graduates of European schools.

It might be a good plan for every dentist in the country who is a legal practitioner to consider himself a committee of one to report to his society every illegal practitioner that he may know about personally.

We have had in this country, on several occasions, fake institutions that sold American diplomas to foreigners who, without any knowledge of dentistry, presume to practice as American dentists in foreign countries.

There is nothing more dangerous than a diploma mill because it turns loose, upon the unsuspecting, men who are criminally ignorant of the healing arts.

Those who know of such concerns should report them at once.

The RUSSIAN

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Hammond, Indiana, dentists	50.00
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Dr. E. D. Bettenhausen, Duluth, Minn.	15.00
New York State Dental Society:	
First District Dental Society, New York	\$500.00
Dr. Philip Nemoff, West New York, N. Y.	5.00
	505.00
North Carolina State Dental Society:	
North Carolina State Dental Society	300.00
Ohio State Dental Society:	
Cleveland Dental Society	500.00
Texas State Dental Society:	
Fort Worth Dental Society	50.00
Wisconsin State Dental Society:	
Dr. W. L. Dunkirk, Union Grove, Wis.	5.00
Total collected	\$3,493.50
Contributions Paid Direct to Dr. Aguilar, Madrid, Spain:	
American Dental Association, Chicago	\$2,500.00
Dr. Otto U. King, Chicago	104.00
	2,604.00
Grand total, November 19, 1923	\$6,097.50

Before you forget it, write a check for as much as you can spare and mail it in to Dr. Otto U. King, Secretary American Dental Association, 5 North Wabash Avenue, Chicago, Illinois.

Quacks Flee as Fake Dentist Goes to Rock Pile

NEW YORK, Dec. 7, 1923.—Quack dentists, of whom there are more than 1,000 practicing in New York, according to the authorities, alarmed by the six months' sentence imposed on "Dr." Irving A. Lipton, of No. 982 Aldus street, the Bronx, are scurrying for cover today like rats leaving a doomed ship, Maurice H. Gottlieb, Deputy Attorney General, declared.

It is a warning and an indication to the rest of these quacks, said Mr. Gottlieb, of what awaits those caught in the legal net spread for them. Many of the fakers already have taken to their heels to escape capture, he said, and inspectors armed with warrants have found many of the bogus laboratories closed and their proprietors gone.

Drive Will Be General

With this campaign the war against professional quacks in general developed yesterday into a consolidation of all the resources of the city and state.

Following a conference in District Attorney Banton's office, at which were present Health Commissioner Monaghan, Deputy Chief Inspector Thomas H. Murphy and Sergeant Fitzgerald, of the Police Department, and Reed B. Dawson and Randolph Harris, of counsel for the New York Medical Society, it was decided that all com-

plaints against unlicensed physicians, midwives and pharmacists received by the city and social agencies should be turned over to the District Attorney's office for investigation and action.

The drive against the dentists is being handled by the Attorney General's office.

"Dr." Lipton was sent to the workhouse by the Bronx Special Sessions Court. He was given six months at hard labor for practicing dentistry without a license.

Lipton was a tailor, but, the authorities say, thought dentistry a much more genteel method of earning a living, and hung out a shingle bearing the legend, "Prosthetic Dentist." A prosthetic dentist is not a dentist at all, but simply a person who makes artificial teeth.

He had been convicted in 1921 for practicing dentistry without a license, and a month later was given twenty days in the workhouse for shoplifting.

Lipton advertised in front of his office that he did X-ray work. An examination by inspectors showed no trace of such an instrument about the place. What motions he went through or what apparatus he palmed off upon his unsuspecting patients as an X-ray outfit the inspectors could never learn.—*New York Evening Mail.*

Laffodontia

If you have a story that appeals to you as funny, send it in to the editor. He may print it—but he won't send it back.

"Sam, I'll give you a pint of Scotch if you'll hurry over to my house and get my grip. Hurry, now!.....What! Haven't you gone yet?"
"Gone? Boss, I's back!"

"Ma, can I go out to play?"
"What, Willie? With those holes in your trousers?"
"Naw, with the kids across the street."

"How did you ever get caught in such a compromising position?"
"Well, he wanted to see what color my eyes were."
"That's harmless enough."
"Yes—but he's nearsighted."

SUPERINTENDENT OF SUNDAY SCHOOL (whose enthusiasm runs toward regular attendance)—"Out of the entire school, only one pupil is absent to-day—little Kitty Morgan—let us hope that she is ill."

"Wha' brand o' bacca are ye smokin', Jock?"
"I dinna ask him!"

SHORT-SIGHTED LADY (*in grocery*): "Is that the head cheese over there?"

SALESMAN: No, ma'm; that's one of his assistants."

RHODA: "What cigarettes do you smoke?"

KITTY: "My husband's."

RADIO BUG: "I tuned in last night and got Honolulu."

"That's nothin'! When I turned in last night I got hell."

BIDDIE: "Suppose you have been in the navy so long you are accustomed to sea legs?"

MIDDIE: "Lady, I wasn't even looking."

HE: "What do you say to a honeymoon in Europe?"

SHE: "But dearest, you know how afraid I am of seasickness."

"Yes, but you ought to know that love is the best remedy for that."

"Perhaps—but—think of the return trip."

YACHTSMAN: "If this squall continues, I shall heave to."

PASSENGER (*warily*): "What a horrid way to put it."

A quartette had just finished singing, "Among the Sleepy Hills of Tennessee."

The hostess noticed one of her guests weeping by himself. She inquired sympathetically:

"My dear man, are you a Tennessean?"

The reply came quickly: "No, madam, I am a musician."

FIVE-YEAR-OLD Freddie was spending the day with his aunt. Dinner was late, and the child began to grow restless.

"Auntie," he said, finally, "does God know everything?"

"Yes dear."

"Every little thing?"

"Yes dear, every little thing."

"Well then," he said in a tone of conviction, "God knows I am hungry."

HALITOSIS

AS DEFINED IN THE CENTURY DICTIONARY

(Hal-i-to-sis) N. N. L.

(L Halitus—Breath .. Osis—Offensive)

Offensive breath, whether arising from diseased or neglected conditions of the teeth, mouth or nose or caused by disorders of digestion, respiration, the excessive use of tobacco, etc., may be readily overcome by the deodorizing properties of—

LISTERINE

Listerine is strictly antizymotic, it inhibits alike the acid fermentation of carbohydrates and the alkaline putrefactive processes of mixtures of meat and saliva, retained as debris about the teeth; hence, Listerine is antagonistic to the activating enzymes of fermentation so often the cause of Halitosis.

Many dental practitioners who advise their patients to use Listerine daily as a mouth-wash, also keep Listerine in an atomizer on the dental bracket readily available for use prior to operations, in self defense against pronounced cases of Halitosis.

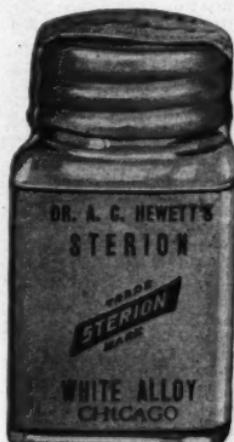
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in a Day*



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	Page
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Alkalol Company	69
Ames Company, The W. V-B	64
American Cabinet Co.	156
American Platinum Works	80
American Tooth Brush Co.	80
Antidolor Mfg. Co.	107-8
Anti-Pyorrhea Chemical Co.	96-7
Atlantic Rubber Corp.	69
Bacon Mfg. Co.	102-3
Balter Tray Mfg. Co.	165
Bauer Chemical Co.	151
Becton, Dickinson & Co.	77
Benko Brothers	138
Berry Dental Laby	93
Bodee Dental Institute	138
Bremer, Dr. H. P.	137
Brewster, E. R. S.	153
Bristol-Myers Co.	81-175
Brophy Dental Mfg. Co.	137
Buffalo Dental Mfg. Co.	144
Burns Dental Casting Machine Co.	118
Campho Phenique Co.	170
Castle Co., Wilmot	109
Central Labys Co.	106C
Chandler, H. M.	136
Chemical Products Co.	111
Clark & Co. A. C.	147
Classified Ads.	124
Colgate & Co.	106H
Columbia X-Ray Co.	106G
Columbus Dental Mfg. Co.	180
Cook Labys, Inc.	179
Corega Chemical Co.	171
Corning Rubber Co.	110
Craig, Dr. Jos. E.	172
Crescent Dental Mfg. Co.	140
Crutcher Dental Depot, T. M.	115
Dee & Co., Thos. J.	125
Dental Emblem Co.	133
Dental Pharmaceutical Co.	87
Dental Products Co.	5
Dentinol & Pyorrhicide Co.	2nd cover
Dentists Supply Co.	84-5-120-1-2-3
deSanto & Hoskins, Inc.	100-1
Detroit Dental Mfg. Co.	72
Diozone Chemical Co.	106E
Dixie Dental Mfg. Co.	176
Doherty Rubber Works, Eugene	175
Downie, Dr. J. H.	174
Dresch Labys Co.	131
Drucker Co., August E.	98
Edwards X-Ray Corp.	8
Electro Dental Mfg. Co.	160
Eu-co-cide Chemical Co.	112
Eureka Suction Co.	168
Excel Chemical Co.	137
Falls City Dental Specialty Co.	136
Florence Mfg. Co.	4th cover
Forhan Company	154
Foster Laboratory	119
French & Co. S. H.	168
Gilbert, Dr. S. E.	172
Gilcrest Co.	137
Green, Dr. L. O.	163
Hance Brothers & White	72
Hanovia Chemical Co.	164
Harvard Company	114
Healey, Dr. J. P.	116
Heidbrink Company	7-61
Hisey Dental Mfg. Co.	82
Hodcarrier People, The	177
Hoffman-LaRoche Chemical Co.	136
Holg Dental Depot, Charles	167
Hood Company, John	92
Ivory, J. W.	176
Jackson & Co., O. W.	117
Jelenko & Co., J. F.	63-71-72A-117
Johnson & Johnson	167
Justi & Son, H. D.	150
Justrite Mfg. Co.	167
Kayle Company	153
Kidder, W. N.	138
Kings Specialty Co.	135
Koch & Sons, A. S.	130
Kondon Mfg. Co.	163
Lambert Pharmacal Co.	59
Lathrop & Co., H. R.	90-1
Lavoris Chemical Co.	134
Lawrence Amalgam	86
Lehn & Fink, Inc.	143
Leiman Brothers	139
Lilly Dental Products Co., Inc.	111
Lincohead Mfg. Co.	71
Lochhead Labys	83
McCarrie School Mech. Dentistry	132
McCaskey Register Co.	Insert
McCormick Rubber Co., E. J.	82
Manhattan Coat Co. Inc.	112
Masel, Isaac	133
Medical Protective Co.	166
Meier Dental Mfg. Co.	168
Metsan Dental Mfg. Co.	111-15-19
Mets Labys, H. A.	128
Mizzy, Inc.	112-16-32
Mu-Col Co.	72
Mynol Chemical Co.	152
Nelson Gold Tooth Co.	133
New-Mix Co.	104
Ney Co., J. M.	10
Noyes Laboratory	72F-G
Oakland Chemical Co.	126
Ostermeier, Dr. G. A.	68
Patterson Dental Supply Co., M. F.	127
Pelton & Crane	62
Pepsodent Company	67-141-145
Perry Mfg. Co., David	170
Petry Retainer Co., Jacob	86
Phillips Milk of Magnesia	99
Pioneer Mfg. Co.	178
Platt, Darwin L.	164
Prest-O-Lite Company	72E
Public Service Cup Co.	75
Pyro-Form Co.	106D
Ransom & Randolph Co.	94-5
Reese & Wiedhoff	162
Reynolds Sons Co., S. H.	164
Riddle & Wise	174
Ritter Dental Mfg. Co.	159
Roscinian Co.	133
Santiseptic Mfg. Co.	138
Searle & Co., G. D.	68
St. Paul Welding & Mfg. Co.	169
Sharp & Dohme	70
Silv-O-Dent Co., The	106A
Smith & Son Mfg. Co., Lee S.	106A
	62-72C-78-9-81-8-9-100F-142
Sodiphene Co.	138
Solos Sanitary Co.	165
Spyco Smelting & Refining Co.	3rd cover
Sprague & Co., J. A.	132
Squibb & Sons, E. R.	106
Stearns & Co., Fredk.	106F
Stern & Co., I.	105
Stempel Dental Specialty Co.	174
Sterion White Alloy Co.	59
Ster-Oil Co.	106B
Terry Mfg. Co., Geo. A.	106B
Thoenbe, L. A. & W. H.	157
Thwaites X-Ray Co.	76
Union Brosch Co., Inc.	66
Valley Mfg. Co.	116
Van Dyk Attachments, Inc.	65
V-B Corporation	161
Victor X-Ray Co.	72D
Wackler Dental Mfg. Co., E. C.	170
Web Sterilizer Co.	165
Wheeler-Brown Specialty Co.	132
White Dental Mfg. Co., S. S.	148-9
Wiggins Sons Co., H. B.	72H
Williams Gold Ref. Co.	73-4
Wilk Dental Laby	113
Winkworth & Co.	72B
Wisconsin Electric Co.	155-173
Zonite Products Co.	129